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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/780,375	02/12/2001	Christoph Hauger	00014	7035

7590

11/08/2002

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EXAMINER

FINEMAN, LEE A

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 11/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/780,375

Applicant(s)

HAUGER ET AL.

Examiner

Lee Fineman

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11/1/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9 and 11 is/are allowed.
- 6) ☒ Claim(s) 10 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☒ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### **DETAILED ACTION**

1. This Office Action is in response to amendments filed 12 September 2002 and 1 November 2002 in paper numbers 9-11 in which claims 8-10 were amended and claim 12 was added. Claims 1-12 are pending.

#### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the image display unit including a reflection display driven at a clock frequency illuminated sequentially with different colors or a single color and including a filter wheel must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### ***Claim Objections***

2. Claim 12 is objected to because of the following informalities:

In claim 12, line 3, "said reflection display" lacks antecedent basis.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

✓ Claim 10 includes the limitations of the reflection display being illuminated sequentially with different colors and with a single color. It is unclear how both multi-color and single color illumination can be accomplished together. For the purpose of examination, the examiner interprets illumination by a single color as more time is spent illuminating that single color.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Ernstoff et al., U.S. Patent No. 4,090,219.

Ernstoff et al. discloses a system (fig. 8) comprising a viewing unit (314) for viewing an object and defining a viewing beam path, an image projection module (302, 304, 306, 308, 310, 312, 320 and 322) for inputting image data into the viewing unit, the image projection module including an image display unit (310) for displaying image data for transmission into the viewing unit, the image display unit including a reflection display (310, column 2, lines 57-58) driven at a clock frequency (column 8, lines 65-66) and illuminated sequentially with different colors as a function of time (column 8, lines 51-56) and the image display unit having a brightness increased

Art Unit: 2872

by providing a time-dependent sequential illumination of the reflection display with only a single color (it is inherent in the system in so far as, if more time is spent on a single color, it will be brighter). The preamble fails to structurally limit the body of claim. Ernstoff et al. meets all of the structural limitations required by the claim in support thereof. As such, Ernstoff et al. must support a surgical microscope in the same way as the structure of the claim.

***Allowable Subject Matter***

7. Claims 1-9 and 11 are allowed.

8. Claim 12 would be allowable if rewritten to overcome the objection set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

9. The following is an examiner's statement of reasons for allowance:

Claims 1-4, 8-9, and 12 are allowable over the prior art for at least the reason that the prior art fails to teach and/or suggest "a plano-convex lens and a plano-concave lens" as set forth in the claimed combination.

Miyagi discloses in fig. 1 a microscope (10) with a viewing unit (11a, 11b) for viewing an object (not shown, column 2, lines 15-17) and defining a viewing beam path (A), an image projection module (11a') for inputting image data into the viewing unit (column 3, lines 32-39), including an image display unit (30) for displaying the image data as claimed but does not teach a plano-convex lens and a plano-concave lens mounted downstream of the image display unit.

Art Unit: 2872

Shioda et al., U.S. Patent No. 6,081,371 discloses in fig. 1 a microscope (2) with a viewing unit (7) for viewing an object (not numbered) and defining a viewing beam path (a), an image projection module (L) for inputting image data into the viewing unit (column 6, lines 31-41), including an image display unit (26) for displaying the image data as claimed but does not teach a plano-convex lens and a plano-concave lens mounted downstream of the image display unit.

Claims 5-7 and 11 are allowable over the prior art for at least the reason that the prior art fails to teach and/or suggest "an image sensor mounted to receive the image data from the image projection module" as set forth in the claimed combination.

Miyagi discloses in fig. 1 an image recording beam splitter (16b) and an image sensor (40) but the image sensor does not receive the image data as claimed.

Shioda et al. discloses an image recording beam splitter (10), an image recording device (35) and an image sensor (column 8, line 3) but the image sensor does not receive the image data as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Response to Arguments***

10. Applicant's arguments with respect to Cooper et al. have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2872

11. Applicant's arguments filed 1 November 2002 have been fully considered but they are not persuasive. Applicant argues that Ernstoff et al. "provides no hint" that the brightness of the reflection display can be increased by providing time-dependent sequential illumination using only a single color. The examiner disagrees. It is inherent in the system in so far as, if more time is spent on a single color, it will be brighter.

12. It is noted by the Examiner that the claim objections made in the previous Office Action have been withdrawn due to amendment presented by the Applicant.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (703) 305-5414. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on (703) 308-1687. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4900.



LAF

November 4, 2002



**Cassandra Spyrou  
Supervisory Patent Examiner  
Technology Center 2800**